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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,353	03/18/2004	Robert Rozbicki	NOVLP024X2/NVLS-2852	9231
22434 7	08/01/2006		EXAMINER	
BEYER WEAVER & THOMAS, LLP			GURLEY, LYNNE ANN	
P.O. BOX 702: OAKLAND, (50 CA 94612-0250		ART UNIT	PAPER NUMBER
, and the second			2812	
			DATE MAILED: 08/01/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

Applicant(s)		
ROZBICKI ET AL.		
Art Unit		
2812		
	ROZBICKI ET AL.	

	Lynne A. Gurley	2812			
The MAILING DATE of this communication appe	ears on the cover sheet with the c	correspondence add	lress		
THE REPLY FILED <u>23 June 2006</u> FAILS TO PLACE THIS APF	PLICATION IN CONDITION FOR A	LLOWANCE.			
1. The reply was filed after a final rejection, but prior to or or this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a Not a Request for Continued Examination (RCE) in compliant time periods:	wing replies: (1) an amendment, aff otice of Appeal (with appeal fee) in (idavit, or other evider compliance with 37 C	nce, which FR 41.31; or (3)		
a) The period for reply expires 3 months from the mailing date	e of the final rejection.				
b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire I					
Examiner Note: If box 1 is checked, check either box (a) or TWO MONTHS OF THE FINAL REJECTION. See MPEP 7	06.07(f).				
Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of exunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office late may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL	tension and the corresponding amount shortened statutory period for reply orig r than three months after the mailing da	of the fee. The approprinally set in the final Offi	riate extension fee ice action; or (2) as		
2. ☐ The Notice of Appeal was filed on A brief in comp	pliance with 37 CFR 41.37 must be	filed within two montl	hs of the date of		
filing the Notice of Appeal (37 CFR 41.37(a)), or any external a Notice of Appeal has been filed, any reply must be filed	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of th			
<u>AMENDMENTS</u>	·	. ,			
3. The proposed amendment(s) filed after a final rejection,			ecause		
(a) They raise new issues that would require further co		TE below);			
 (b) ☐ They raise the issue of new matter (see NOTE below) (c) ☐ They are not deemed to place the application in be 	•••	dualas as aimalificas	the increase for		
appeal; and/or	tter form for appear by materially re	ducing or simplifying	the issues for		
(d) They present additional claims without canceling a	corresponding number of finally rej	ected claims.			
NOTE: (See 37 CFR 1.116 and 41.33(a)).					
4. The amendments are not in compliance with 37 CFR 1.1	21. See attached Notice of Non-Co	mpliant Amendment	(PTOL-324).		
5. Applicant's reply has overcome the following rejection(s): 35 U.S.C. 102 and 35 U.S.C. 103 with Hashim et al. (US 6,287,977).					
 Newly proposed or amended claim(s) would be a non-allowable claim(s). 	•	•	•		
7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows:	☐ will not be entered, or b) ☒ wi vided below or appended.	II be entered and an e	explanation of		
Claim(s) allowed:					
Claim(s) objected to:					
Claim(s) rejected: <u>1-23</u> .					
Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE					
8. ☐ The affidavit or other evidence filed after a final action, but	it hefore or on the date of filing a N	otice of Anneal will no	nt he entered		
because applicant failed to provide a showing of good an was not earlier presented. See 37 CFR 1.116(e).	d sufficient reasons why the affiday	vit or other evidence is	s necessary and		
9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar	overcome all rejections under appea	al and/or appellant fa	ils to provide a		
10. ☐ The affidavit or other evidence is entered. An explanatio REQUEST FOR RECONSIDERATION/OTHER	•		•		
 The request for reconsideration has been considered bu <u>See Continuation Sheet.</u> 	at does NOT place the application in	n condition for allowa	nce because:		
12. Note the attached Information Disclosure Statement(s).	(PTO/SB/08 or PTO-1449) Paper N	lo(s)			
13. \(\text{Other: PTO FOrm 892}.	(· · · — .	1 1		
		Jyme A. Su	sley		
•		Lynne A. Gurley			
		Primary Patent Exa	V aminer		

Art Unit: 2812

Continuation of 11. does NOT place the application in condition for allowance because: The Examiner has considered Applicant's remarks. In response to the remark concerning neither reference showing step (a) and (b), Gopalraja shows in column 13, lines 8-35 that the high energy sputter deposition of the barrier layer is continuous so that it deposits the diffusion barrier while it re-sputters the diffusion barrier from the bottom of the contact and cleans the area including the underlying cu line. The process etches through the barrier layer at the bottom of the contact and redeposits on the sidewalls. When the copper layer is reached, it too is redeposited. The step of depositing a second portion of the barrier layer is met by the redeposition of the barrier layer caused by the high energy sputtering process. Note that both the barrier layer and the copper are resputtered. In regard to Hashim, upon further consideration, the rejection has been reconsidered and withdrawn. While Hashim did substantially show step (a), Hashim failed to show that the first portion of the diffusion barrier is deposited comprising sputtering metal from a target, and Hashim failed to show step (b) in combination with step (a). Also, see US 6,607,977 to Rozbicki which teaches a similar process to sputter deposit, redistribute and deposit the diffusion barrier. Additionally, see US 6,919,275 to Chiang et al.